U.S. ENVIRONMENTAL PROTECTION AGENCY
INITIAL POLLUTION REPORT

I. HEADING

DATE: September 6, 2006

SUBJECT: Matteo Iron and Metal Site
West Deptford Twp., Gloucester County, New Jersey

FROM: Thomas P. Budroe, On-Scene Coordinator
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POLREP NUMBER: 1 (Initial) **BB-1**

II. BACKGROUND

Site Number:	KD
Response Authority:	CERCLA
CERCLIS Number:	NJD011770013
NPL Status:	Proposed
State Notification:	NJDEP notified
Action Memorandum Status:	September 30, 2005
Start Date:	May 24, 2006

III. SITE INFORMATION

A. Site Category

Former battery disposal area, active scrap recycling facility.

B. Preliminary Assessment Results

The Site is located at 1692 Crown Point Road in West Deptford, Gloucester County, New Jersey. The Site has been operated as a junkyard, recycling facility, and an unregistered landfill since approximately 1961. The unregistered landfill

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accepted crushed automotive battery casings, and industrial and domestic waste. An incinerator was used from at least the early 1970s to the mid-1980s to burn copper wire and to melt lead battery terminals for lead reclamation. Crushed battery casings were landfilled in the wetlands adjacent to Hessian Run and are currently evident along most of the southern bank of the creek.

Currently, Matteo Iron and Metal operates a scrap metal recycling facility on a portion of the Site (5 acres) closest to Crown Point Road. A portion of the scrap yard is paved near the entrance of the weigh station. Soil contamination was documented in the unpaved portion of the scrap yard. The remainder of the Site west of the scrapyard
(75 acres) is not currently used and is comprised predominantly of heavily vegetated, undeveloped land bordered by Woodbury Creek to the west, Hessian Run to the north, and a residential trailer park (Willow Woods) to the south. The Site is located approximately 1.2 miles from the Delaware River at the confluence of Woodbury Creek and Hessian Run. Based on flood plain data, at least two-thirds of the Site is situated within the 100-year flood plain at nine feet above mean sea level. Wetland habitats are present in and around the Site.

In 1991 during a test pit study conducted by the NJDEP, lead was detected at 39,200 mg/kg at a depth of four feet and total petroleum hydrocarbons were identified at a depth of three feet at 44,600 mg/kg. Additional test pits conducted by the NJDEP in 1996 identified the presence of lead at 47,900 mg/kg at a depth of 12 feet. Sediment sampling conducted in 1997 by the NJDEP as part of the Site Investigation (SI) identified lead (8,500 mg/kg) and PCBs (78 mg/kg) in Hessian Run adjacent to the central portion of the crushed battery casing area.

A Remedial Investigation (RI) conducted by the NJDEP revealed the maximum concentration of lead detected in the surface soils within the active facility was 20,700 mg/kg. Surface soil samples collected during the RI outside of the immediate areas of the scrap yard and the burial areas revealed noncontiguous spots of soil contamination throughout the Site.

Surface soil sampling conducted as part of an Integrated Assessment by the EPA Removal Action Branch (RAB) and Pre-remedial Section within the landfill area during April 2005 generally confirmed previous sample results with respect to the lead contamination. Three of the samples collected from one particular area near the boundary between the Site and Willow Woods detected lead at estimated laboratory concentrations of 1,520 mg/kg, 973 mg/kg, and 410 mg/kg. A sample collected from the lawn of a single-family residence adjacent to the eastern end of the Site detected lead at an estimated laboratory concentration of 1,400 mg/kg.

The maximum concentration of lead detected in the sediments during the RI was 35,200 mg/kg at a depth of one to two feet in Hessian Run near the north shoreline. Lead was also detected as high as 19,500 mg/kg at one location near the north shoreline at a three foot depth, the maximum depth sampled. The

maximum concentration of PCBs detected was 8.3 mg/kg from the upper six inches of Hessian Run near the creek bank. Surface water samples collected from locations in both Hessian Run and Woodbury Creek during the RI revealed the presence of lead above NJDEP Surface Water Quality Standards ecological criteria and human criteria. The highest lead concentration detected was 87.4 ug/l.

Acute sediment toxicity testing conducted by the NJDEP revealed that a sample collected at one of the stations in Hessian Run, across from the battery casing burial areas, showed 100% mortality to the benthic organisms tested. Significant mortality was also observed from the sediments near the western portion of the Site, including near the confluence with Woodbury Creek. An Ecological Risk Assessment completed in June 2005 by the EPA Environmental Response Team demonstrated the link between site contaminants and environmental impact in the aquatic and terrestrial ecosystem

Based on test pits conducted during an NJDEP field investigation, the volume of waste material landfilled at the Site is estimated to be 80,000 cubic yards. Of this total, approximately 23,000 cubic yards consists of battery casings, 22,000 cubic yards of battery casings mixed with general waste, and 35,000 cubic yards of general waste. It is estimated that there are an additional 7,000 cubic yards of battery casings in the sediments of Hessian Run to a depth of three feet, as measured 20 feet from the south bank. Not including the area covered by the battery casings in the sediments of Hessian Run, there are approximately 10,500 cubic yards of sediments to a depth of one foot with contamination greater than the NJDEP SEL Sediment Quality Criteria and approximately 99,500 cubic yards of sediments to a depth of three feet with contamination greater than the SEL. The volume of soil contamination (not including the battery casings) identified above NJDEP Residential Direct Contact Soil Cleanup Criteria across the entire Site is estimated to be 58,000 cubic yards.

C. **Situation**

This polrep was drafted to serve as the retroactive initial polrep (polrep 1) for the removal action (BB-1) being funded and conducted by the Potentially Responsible Party (PRP) under and Administrative Order on Consent (AOC) CERCLA Docket No. 02-2006-2013. Polreps two and three were previously drafted to document the work being conducted under this AOC, although, the previous polrep 1, was actually documenting the work conducted as a fund-lead removal action (RV-1) and cannot satisfy the requirements as the initial polrep for this PRP lead (BB-1) removal action. The Start Date previously listed on Polreps two and three have been amended in this Polrep to reflect the date the PRP started field work.

The AOC between EPA and Matteo Iron and Metal (Matteo) was signed on May 4, 2006. The AOC directed Matteo to conduct a CERCLA Removal Action to include, in addition to other tasks, fence installation and the establishment of

engineering controls to restrict customer access to contaminated portions of the operating facility.

EPA approved Matteo's Work Plan, required by the AOC, on May 22, 2006. On May 24, 2006, Matteo began Site work under the AOC. It is important to note that Matteo completed an engineering survey of their property boundaries and instituted some engineering controls to mitigate customer contact with contaminated areas, two tasks included in the AOC scope of work, prior to signing the AOC.

Analytical results from soil samples collected close to and on both sides of the property boundary between Willow Woods and Matteo revealed the presence of elevated levels of lead in the surface soil. This area was an isolated area where crushed battery casings were observed at the surface. Since the Site fence had to be constructed through this contaminated area, a soil cleanup was conducted prior to fence construction. Matteo informed EPA of their interest and intention of conducting the soil cleanup located around their property line and that of the trailer park. EPA allowed Matteo to conduct the soil cleanup without entering into an Administrative Order. This removal action was designated with removal activity code PJ1 and is a separate removal action with a scope of work separate and distinct from the scope of work required by AOC CERCLA Docket No. 02-2006-2013. The polreps for PJ1 are also being drafted separately from this removal action (BB-1).

The PRP has completed all the field work required by the AOC. See Polrep 4 (final) for additional information.

IV RESPONSE INFORMATION

A. Status of Actions

All field work required by the AOC has been completed.

B. Next Steps

All field work required by the AOC has been completed. The final report provided by the PRP and required by the AOC is being reviewed by the OSC.

C. Key Issues

The Site has been proposed for placement on the National Priorities List.

V COST INFORMATION

Site work is being funded by the PRP.

VI. Disposition of Wastes

The following table lists the waste quantities shipped for treatment/disposal as of 8/1/06.

Waste stream	Loads	Quantity	Disposal/ Treatment	Disposal Facility
Nonhazardous Soil	1	10.7 tons	Landfill	Clean Earth of Philadelphia, Inc. Philadelphia, PA
TOTALS	1	10.7 tons		